List of Proposed Projects to Support Transformation of 2nd Brigade, 25th Infantry Division (L), Hawaii

1. Tactical Vehicle Wash at Kahuku Training Area (KTA) – Propose to construct one vehicle wash at Kahuku Training Area. The wash facility would be designed to accommodate an 18.3-meter long by 3.7-meter wide vehicle and would have four wash stations that would be used to wash two heavy tracked vehicles, two large vehicles, and four small vehicles in one hour, or a similar combination. The proposed wash system would utilize a high-pressure wash system and would recycle water to minimize wastewater disposal. The water would flow through a water sediment basin, an equalization basin, and the secondary treatment. Treatment would include oil and grease removal, grit removal, and organic control. An oil-water separator would be provided to treat any residual water that did not go through the main system. The facility would be constructed in the vicinity of the proposed Combined Arms Collective Training Facility (CACTF) centrally in the Kahuku Training Area. Estimated Energy/Utilities Requirements: Electrical Power: Estimated at 95.4 KW. Estimated Energy Consumption: 546,482 KWH/YR. Heating System: None; Air Conditioning System: None; Water Supply: 13,470K gal/year. Probable environmental effects: Potential impacts during construction could include, but are not limited to, cultural and historical impacts, impacts to natural resources such as plants and animals, and an increase in noise and dust levels. Operational impacts may include wastewater and infrastructure impacts.

2. Combined Arms Collective Training Facility (CACTF) at Kahuku Training Area (KTA) – Propose to construct a 24 building Non Live-Fire CACTF and range operation support facilities. Mock City structures would include: two Warehouse Buildings, a Municipal Building, an Office Building, a Service Station, four Business Buildings, one Hotel Building, a Police Station/Jail, a Church and collocated Cemetery, Bank Building, a Townhouse, nine Residences, one School Building, and a Grass Airfield. Additional landscaping around the facility would include a simulated park, a simulated farm field, a simulated open-air market, and a sanitized, simulated dump. This sanitized, simulated dump, would be made from sanitized cement from the existing facility, and would be used as a training aid designed to replicate a third world refuse area without the associated refuse. Proposal includes the renovation of ten existing structures for use at this training facility. Estimated Energy/Utilities Requirements: This project would require connection to the existing primary power distribution system. The nearest available power is approximately six kilometers from the site. (The old NIKE Command Site has existing power that would be replaced with new construction). A new 12.47 kV, three-phase primary line would be constructed to bring primary power to the site. Once at the site, primary power would be run underground to feed a pad mounted transformer located near the Operations Storage Building and a pad mounted transformer at the After Action Review Building. All buildings would be supplied 120/240V, single-phase, secondary power underground from the transformers. Sewer: All sewage on the site will be collected in the aerated vault latrine. Removal of sewage from the site will be by pumper truck. No sewage lines or septic field are required. Water: Water would be trucked to the site. No waterline, distribution systems or well are required. Telephone: Telephone service is available within six kilometers of the proposed site. Telephone service would be run overhead to the site with the primary power line. Telephone service will be provided at the applicable buildings. Telephone cable will be run underground between buildings. Data Distribution: Downrange target control and data distribution cables will be installed underground from the large AAR Building to CACTF targets. Fiber optic cables will be

installed from the AAR Building to the CACTF video cameras in the training objective buildings. This proposed project would be sited approximately two and one half miles west of the town of Kahuku in the Kahuku Training Area. Probable environmental effects: Potential impacts during construction could include but are not limited to safety considerations, cultural/historic impacts, impacts to natural resources such as plants and animals, traffic, erosion and an increase in noise and dust levels. Operational impacts may include safety considerations, traffic and noise and air quality.

3. McCarthy Flats Multi-Purpose Qualification Complex at Schofield Barracks – Propose to construct a standard Qualification Training Range that would replace five existing small arms ranges and enable the re-design of our Schofield Barracks range facilities. This range complex would include 12 lanes of combat pistol and Military Police qualifications targery, 24 lanes of rifle modified record fire lanes with12 multipurpose machine gun/sniper lanes and 40 lanes of basic 10/25 mortar firing range (zero). Estimated Energy/Utilities Requirements: This project would require connection to the existing primary power distribution system. The requirements for the various elements follow: Range Distribution Power 120/240V secondary power would run from the control towers power panels underground to the target cable junction boxes. Range targets will be fed using 240V, single-phase secondary power. 120V circuits would be required for the heated/illuminated range limit markers at 300, 700 and 1000 meters on the machine gun/sniper ranges. A 120V circuit is required for the heated/illuminated range limit marker at 31 meters on the pistol range. The controls for targets require 120/240V. Voltage available to each target will be no less than 95 percent of its rated operating voltage. A separate 120V outlet is required in each target emplacement for target thermalization. Sewer: All sewage on the site will be collected in the aerated vault latrine. Removal of sewage from the site would be by pumper truck. No sewage lines or septic field are required. Water: Water would be linked to the current Schofield Barracks infrastructure. The availability of these utilities is expected to continue in the future. The range facility's proposed location is on the existing Schofield Barracks range footprint on McCarthy Flats. This proposed project would be sited approximately one and one quarter mile north of the intersection of Beaver Road and Trimble Road. The proposed range project would be oriented to the west using the current range impact area. Probable environmental effects: Potential impacts during construction could include but are not limited to safety considerations, cultural impacts, impacts to natural resources such as plants and animals, and an increase in noise and dust levels. Operational impacts may include safety considerations, impacts to cultural and natural resources such as plants and animals, noise and air quality, and soil and water contamination.

4. Urban Assault Course and Training Facilities at Schofield Barracks – Propose to construct a state-of-the-art Urban Assault Course (UAC) that would include a Breach Facility, Urban Assault Training Facility and a Live-Fire Shoothouse. The Breach Facility would be used to train soldiers in the proper techniques to enter buildings through doors, windows, and walls. The Urban Assault Training Facility would train soldiers in other techniques associated with urban combat, including underground training. The Live-Fire Shoothouse would be used to train individuals, squads, and platoons on the proper techniques to enter and clear a building. The Shoothouse is a live fire trainer that is the culmination of the training at the Breach Facility and

the Urban Assault Training Facility. This facility is required to support the combined arms urban operations training strategy for conducting full spectrum operations (offense, defense, stability and support). Range operations facilities will include a small After Action Review Building, Dual-Sex Dry Vault Latrine, and an Operations/Storage Building. Range operational supporting facilities include a new access road and temporary parking area for privately owned vehicles (POV) and tactical vehicles, primary and secondary power, and data distribution systems. Storm drainage, site improvements and berms will be provided as necessary. Estimate Energy/Utilities Requirements: This project would require connection to the existing primary power distribution system. The nearest available power (12.47 kV, three phase) is 500 meters away. Notional overhead power lines would be run from building to building throughout the "City" training objective, but will not be connected nor energized. The requirements for the various elements follow: Range Distribution Power 120/240V secondary power would be run from the small After Action Review building power panel underground to the outlying structures (Shoot House and other appropriate facilities). Sewer: All sewage on the site would be collected in the aerated vault latrine. Removal of sewage from the site will be by pumper truck. No sewage lines or septic field are required. Water: Water will be trucked to the site. No waterline, distribution systems or well are required. Telephone: Telephone service is available within 1000 meters of the proposed site. Telephone service would run overhead to the site with the primary power line. Telephone service would be provided at the After Action Review Building and other applicable buildings with the cable run underground between buildings. The availability of these utilities is expected to continue in the future. This facility is proposed to replace the Military Assault Course on the Kolekole Ranges Schofield Barracks and would be sited 100 yards north of Trimble Road, approximately one and a quarter miles west of the intersection of Beaver and Trimble Road. The proposed range project would be oriented to the north using the current range impact area. Probable environmental effects: Potential impacts during construction could include safety considerations, but are not limited to, cultural/historic impacts, impacts to natural resources such as plants and animals, and an increase in noise and dust levels. Operational impacts may include safety considerations, and noise and air quality.

5. Virtual Fighting Training Facility (VFTF) at Schofield Barracks – Propose to construct an 11,496 square foot single-story state-of-the-art VFTF to house organizations and functions required to conduct embedded war-fighting simulation operations to support small arms precision marksmanship and dismounted weapons system training in a virtual environment. The facility would include 25 Engagement Skills Trainers Lanes (video game like weapons simulators), After-Action Review (AAR) room, conference area, break area, administrative office space, storage, restrooms, telecommunications room, mechanical room, and electrical room. Supporting facilities would include; water, sanitary sewer, storm drainage, electric service, fire protection and alarm systems, telephone, paving, walks, curbs, gutters, parking, information systems, state-of-the-art intra-communications and intercommunications systems and site improvements. Estimated Energy/Utilities Requirements: Electrical Power: Estimated at 500 KW. Estimated Energy Consumption: 1,008,800 KWH/YR. Air conditioning is estimated at 50 tons. Water Supply: 14K gal/year. Sewer System: Sanitary sewer will connect to the existing installation sewer system by gravity flow. The building would be constructed on the south side of Trimble Road, approximately one half mile west of the intersection of Beaver

Street and Trimble Road. Probable environmental effects: Potential impacts during construction could include, but are not limited to, cultural/historic impacts, impacts to natural resources such as plants and animals, and an increase in noise and dust levels. Operational impacts may include energy.

6. Range Control Facility at Schofield Barracks – Propose to construct an administrative facility to support consolidated command & control, and other operations, especially range maintenance operations, for range activities at all Army training areas on Oahu. The proposed project would add 22,133 square feet (SF) of new facilities and would involve the demolition of eight currently occupied facilities comprising 35,867 SF. Supporting facilities would include water, sewer and electrical service, paving, walks, parking, security fencing, information systems and site improvements. Estimated Energy/Utilities Requirement: Electrical lines are available approximately 160 feet west of the project site. The range control complex would includes administrative and shop/warehouse space. Power requirements to operate building systems and equipment include: administrative space - single phase, 250 amp service; carpentry shop – three phase/four 4 wire, 250 amp service; welding shop, three phase/four wire, 400 amp service. A 150 KVA transformer is also required. Air conditioning (estimated at 25 tons) would be provided for administrative space only. Mechanical ventilation will be provided in warehouse and shop areas. Heating is not required. Water: Water would be provided through a connection to an existing 6" line approximately 180 feet east of the proposed site. Sewer: Collection and treatment of sanitary sewage would be provided through a connection to the existing sanitary sewer system on-site. Continued availability of these resources is anticipated. The proposed facility would be constructed on Beaver Road at a site presently a field. This proposed project would be sited on the west side of Beaver Road, approximately one half mile north of the Trimble and Beaver Roads' intersection. Probable environmental effects: Potential impacts during construction could include, but are not limited to, cultural/historic impacts, impacts to natural resources such as plants and animals, and an increase in noise and dust levels. Operational impacts may include energy.

7. Easement/Construct Road between Schofield Barracks and Helemano Military Reservation (HMR) – Propose to purchase approximately 27 acres of land in a perpetual easement and construct a 15 feet wide gravel road with 3 feet wide gravel shoulders on both sides that would run from Schofield Barracks Area to HMR. This road provides military vehicle access from Schofield Barracks to HMR. In conjunction with Drum Road, described above, this project would provide a road network from Schofield Barracks to training areas in the Kahuku Training Area. This proposed project would be sited from Schofield Barracks to the HMR for approximately 7 miles and would be north of the town of Wahiawa and would use as much of the existing agriculture trails as possible. See enclosed map *Proposal: Expand and Improve Oahu Training Area Access Roads* for proposed location. Probable environmental effects: Potential impacts during construction could include, but are not limited to, cultural/historic impacts, impacts to natural resources such as plants and animals, and noise and dust. Operational impacts may include traffic, air and noise quality, and public access.

8. Battle Area Complex (BAX) at Schofield Barracks – Propose to construct a BAX designed for company gunnery training and qualification requirements of the weapons systems of the proposed Interim Brigade Combat Team (IBCT). The range would also supports dismounted Infantry Platoon tactical live fire operations either independently of, or simultaneously with, supporting vehicles. The range would include the following training objective features: Two course roads with crossover capability, 22 stationary armor targets, three moving armor targets, 167 stationary infantry targets, 27 moving infantry targets, 16 machine gun/observation bunkers, two grenade/breaching obstacles, three landing zones, 13 mortar simulation devices, and eight vehicle firing positions. Range operations support facilities will include a vault latrine, bleacher enclosure, covered mess area, range operations center, storage building, ammunition loading dock and an After Action Review building. Supporting facilities will include site improvements, erosion control, a bivouac area, electrical service, security fencing and gates. Estimated Energy/Utilities Requirements: This project would require connection to the existing primary power distribution system. The nearest available power (12.47kV, three phase) is 300 meters away. A new 12.47kV, three-phase primary line will be constructed to bring primary power to the range site. The existing line is approximately 300 meters from the site. Once at the site, primary power will be run underground to feed a pad mounted transformer located near the Control Tower. All buildings will be supplied 120/240V, single phase, secondary power underground from the transformer. Air conditioning (approximately 20 tons) would be provided. Sewer: All sewage on the site would be collected in the aerated vault latrine. Removal of sewage from the site will be by pumper truck. No sewage lines or septic field are required. Water: Water would be trucked to the site. No waterline, distribution systems or well are required. Telephone: Telephone service is available within 300 meters of the site. Telephone service would be run overhead to the site with the primary power line. Telephone service and Video Teleconferencing capabilities would be provided applicable buildings via underground cable and fiber optic. Downrange target control and data distribution cables would be installed underground from the Control Center to the applicable targets. Telephone and fiber optic cable service could be connected to the Installation Information Infrastructure that connects to the Information Systems Facility and Mission Support Training Facility. Distances to the fiber optics project range from 3281 feet for Building 1 to 6996 feet for Building 2. All Outside plant maintenance holes and handholes would be connected using 2 X 4 inch concrete encased conduits within the project boundaries. This proposed range would be sited on the west side of Beaver Road and north of Trimble Road on the pre-existing range complex and range impact area on Schofield Barracks range area. Probable environmental effects: Potential impacts during construction could include but are not limited to safety considerations, cultural impacts, impacts to natural resources such as plants and animals, and an increase in noise and dust levels. Operational impacts may include safety considerations, impacts to cultural and natural resources such as plants and animals, noise and air quality, and soil and water contamination.

9. Motor Pool Maintenance Shops at Schofield Barracks – Propose to construct a 193,923 SF motor pool facility or parking lot for vehicles consisting of standard organizational and direct support vehicle maintenance shops. The facility would include new tactical equipment maintenance shops with repair bays, separate administrative area, shop control, overhead cranes, petroleum, oil and lubricants (POL) facilities, deployment equipment storage facilities, oil-water

separators, hardstand and organizational vehicle parking areas. Supporting facilities would include water, sanitary sewer, storm drainage, electric service, exterior lighting, fire protection and alarm systems, paving, walks, curbs, and gutters, parking, roadways, information systems, and site improvements. Estimated Energy/Utilities Requirements: Electrical Power: Present power grid distribution system would be used. Present system can provide the required additional power. Continued availability is anticipated. Estimated energy usage: 1,2480,000 KWH/YR; Heating System: None. Air Conditioning System: Approximately 170 tons of air conditioning would be provided by a chilled water system. Water Supply: The existing water distribution system is adequate for domestic water (17,600 kgal/yr) flow and fire demand requirements. Sewage System: The existing gravity collection system is adequate. This motor pool would be sited on current agriculture fields within the proposed South Range Land Acquisition. The Army in Hawaii is conducting informal discussions with the owner to site this facility on a location that is satisfactory to both parties and reduces potential impacts. Probable environmental effects: Potential impacts during improvement/construction could include, but are not limited to, cultural and historical impacts, impacts to natural resources such as plants and animals, and noise and dust. Operational impacts may include wastewater, infrastructure impacts and solid waste disposal.

10. Tactical Vehicle Wash at Schofield Barracks – Propose to construct a wash facility at Schofield Barracks. The wash facility would be designed to accommodate an 18.3-meter long by 3.7-meter wide vehicle and would have four wash stations that would be used to wash two heavy tracked vehicles, two large vehicles, and four small vehicles in one hour, or a similar combination. The proposed wash system would utilize a high-pressure wash system and would recycle water to minimize wastewater disposal. The water would flow through a water sediment basin, an equalization basin, and the secondary treatment. Treatment would include oil and grease removal, grit removal, and organic control. An oil-water separator would be provided to treat any residual water that did not go through the main system. Estimated Energy/Utilities Requirements: Electrical Power: Estimated at 95.4 KW. Estimated Energy Consumption: 546,482 KWH/YR. Heating System: None; Air Conditioning System: None; Water Supply: 13,470K gal/year. Probable environmental effects: Potential impacts during construction could include, but are not limited to, cultural and historical impacts, impacts to natural resources such as plants and animals, and noise and dust. Operational impacts may include wastewater and infrastructure impacts.

11. Multipurpose Qualification Range at proposed site for South Range – Propose to construct a new Qualification Training Range (QTR) with a total of 26 firing points. Ten lanes would be used for Modified Record Fire, and 16 lanes used for a standard automated Combat Pistol Qualification Course. Primary facilities would include all construction a control tower, maintenance building, a latrine, a bleacher enclosure, personnel and vehicle firing positions, vehicle range access and target service roads, target maintenance trails, limit markers, lane markers, site improvements, earthwork, site drainage, range flagpole, erosion control, and information systems. Supporting facilities include all construction outside the perimeter of the range complex and consist of electric service, security fencing, area and security lighting, electrical transformers, storm drainage, information systems, and site improvements. Estimated

Energy/Utilities Requirements: This project would require connection to the existing primary power distribution system. The nearest available power (12.47kV, three phase) is 1,200 meters away. The requirements for the various elements follow: Range Distribution Power 120/240V secondary power would be run from the control tower power panel underground to the target cable junction boxes. A separate 120V outlet is required in each target emplacement for target thermalization. Heating and air conditioning (2 tons) for control towers, and Mechanical ventilation: 5,000 CFM. Sewer: All sewage on the site would be collected in the aerated vault latrine. Removal of sewage from the site would be by pumper truck. No sewage lines or septic field are required. Water: Water would be trucked to the site. No waterline, distribution systems or well are required. The availability of these utilities is expected to continue in the future. Telephone: Telephone service is available within 1200 meters of the proposed site. Telephone service would be provided at the Control Tower and other applicable buildings and run overhead to the site with the primary power line. Telephone cable will be run underground between buildings. This qualification range would be sited on existing agriculture fields within the proposed South Range Land Acquisition. The Army in Hawaii is conducting informal discussions with the owner to site this facility on a location that is satisfactory to both parties and reduces potential impacts. Probable environmental effects: Potential impacts during construction could include but are not limited to safety considerations, cultural/historic impacts, impacts to natural resources such as plants and animals, and noise and dust. Operational impacts may include safety considerations, impacts to cultural and natural resources such as plants and animals, noise and air quality, and soil and water contamination.

12. Land Easement/Road Construction between Schofield Barracks and Dillingham Military Reservation (DMR) – Propose to purchase a perpetual easement approximately 55 acres and construct a 15-foot wide gravel road with 3 feet wide gravel shoulders on both sides. The road would run from Schofield Barracks to DMR. This road would provide military vehicle access between Dillingham Military Reservation and Schofield Barracks. Currently, the US Army uses the existing public road network from Schofield Barracks along the North Shore. Work would include grading, paving, drainage improvements, culverts at stream crossings, guardrails at drop offs, and storm drainage structures and lines to preclude excessive amounts of storm runoff from sheet flowing over the road and endangering vehicular traffic on the road. Work would also include provisions for telecommunication lines that would run along side the new paved road. Road grades steeper than 10 percent will be paved with asphalt or concrete. Supporting facilities would include provisions for shotcrete, guardrails, retaining walls, drainage structures (concrete swales, grass swales, etc.), signs and information systems. This proposed project would be sited from Schofield Barracks to the DMR. The approximate length of this road is 15 miles. See enclosed map of *Proposal: Expand and Improve Oahu Training Area Access Roads* for proposed location. Probable environmental effects: Potential impacts during construction could include, but are not limited to, cultural/historic impacts, impacts to natural resources such as plants and animals, and noise and dust. Operational impacts may include visual, cultural and natural resources, traffic, air and noise quality, and public access.

13. Fixed Tactical Internet (FTI) at Schofield Barracks – Propose to install a FTI that would provide necessary tactical communications infrastructure at home-station, enabling units to train

using digitized equipment 24 hours per day, seven days a week without the need for signal units to deploy to the field. When linked to the installation information infrastructure, FTI could also provide connectivity for the command and control integration of virtual and constructive simulation training with live fire. FTI is a group of antennas, similar to small cellular phone towers, strategically placed through the installation and training area, whereby radios within military vehicles would be able to receive communication signals to process both voice and data. A group of 4-6 antennas will be emplaced in the Schofield Barracks training area.

14. Multiple Deployment Facility at Wheeler Army Air Field (WAAF) – Propose to construct a Multiple Deployment Facility to support deployment training and deployments for contingency operations. The facility would encompass a Unit Marshalling Area, Transportation Inspection Point, Scale House, 6,000 square foot (SF) Vehicle Maintenance Facility, De-fueling Facility, Wash Rack, 2,479 SF Vehicle Holding Area, Material Handling Equipment, and a 60,000 SF Warehouse. Supporting facilities include; water, sanitary sewer, storm drainage, electric service, exterior lighting, fire protection and alarm systems, telephone, paving, fencing, parking, information systems, and site improvements. Sustainable design elements will be incorporated in the facility design including full system commissioning air conditioning. Estimated Energy/Utilities Requirements: Electrical Power: Estimated at 837 KW; Estimated Energy Consumption: 4,794,919 KWH/YR. Electrical power would be distributed through base substation and distribution system. Present distribution system is believed adequate to meet the project requirement without enlargement. The designer is to confirm this during design. Energy Use Impact: Present systems are believed adequate to support the new facility under this project. Heating System: None; Air Conditioning System: Approximately 10 tons; Water Supply: 730K gal/year; Sewer System: Sanitary sewer will connect to the existing installation sewer system by. This proposed facility would be sited on a previously disturbed site south of Airdrome Road on a pre-existing abandoned airstrip at WAAF. Probable environmental effects: Potential impacts during construction could include, but are not limited to, cultural/historic impacts, impacts to natural resources such as plants and animals, and noise and dust. Operational impacts may include air traffic, safety considerations, noise, and water quality.

15. Upgrade Air Field for C-130 Aircraft Operations at Wheeler Army Air Field – Propose to repair the existing 694' x 837' aircraft parking apron. Repair would strengthen the apron to accommodate C-130 aircraft staging operations for the proposed life cycle of the current Wheeler Army Airfield. An apron is roughly an airfield equivalent to a shoulder on a roadway. The apron, like a roadway shoulder, frees the runway for continuous use while loading and uploading operations are taking place. This proposed project would be sited on the existing apron on the west side of WAAF just north of Airdrome Road. Probable environmental effects: Potential impacts during construction could include, but are not limited to, cultural/historic impacts, impacts to natural resources such as plants and animals, and noise and dust. Operational impacts may include air traffic, safety considerations, noise, and water quality.

16. Troop Rigger Facility at Hickam Air Force Base – Propose to construct a 10,872 square foot, two-story troop rigging facility as an integral component of the Army/Air Force Joint Mobility Complex (JMC). Proposed project would include parachute packing, parachute repair, rig

supply and equipment, drying tower, administration and a storage room. Estimated Energy/Utilities Requirements: Electrical power would be distributed through base substation and distribution system. Present distribution system is believed adequate to meet the project requirement without enlargement. Electrical Power: Estimated at 165 KVA; Estimated Energy Consumption: 327,354 KWH/YR; Heating System: None; Air Conditioning System: Approximately 30 tons; Mechanical ventilation (wall mounted propeller fans) would be provided to ventilate the parachute drying tower; Water Supply: 220 kgal/year; Sewer System: Sanitary sewer will connect to the existing installation sewer system by gravity flow. This proposed facility would be sited on Hickam Air Base between the existing taxiway and an existing football field along Moffet Street. Probable environmental effects: Potential impacts during construction could include, but are not limited to, cultural/historic impacts, impacts to natural resources such as plants and animals, and noise and dust. Operational impacts may include air traffic, safety considerations, noise, and water quality.

17. Battle Area Complex (BAX) at Pohakuloa Training Area (PTA) – Propose to construct a BAX designed for live-fire, maneuver gunnery training and qualification requirements of the weapons systems of the proposed Interim Brigade Combat Team (IBCT) and the division's legacy forces. The primary features of the range would include: four course trails with crossover capability, 30 reconfigurable stationary armor targets, six moving armor targets, 174 reconfigurable stationary infantry targets, 14 moving infantry targets, 17 machine gun/observation bunkers, 2 gunnery/breaching obstacles, 3 landing zones, 18 mortar simulation devices, 16 hulldown defilades, vehicle firing positions and grenade/breach facades/trench complexes, tank trails and service roads. All targets are fully automated and the event specific target scenario is computer driven and scored from the control Structure. Target and reconfigurable stationary armor target will be solar powered, radio-controlled targets with target coffins. Primary and secondary power and information and data distribution systems, heated and illuminated limit markers, safety cameras, security fencing, and range flagpoles are required. Storm drainage, service roads, site improvements, and berms will be provided as necessary. Range support facilities at the rear or base of the range include: electrical service; paving, walks, curbs and gutters; site improvements and demolition. Telephone cable service and fiber optic could be accessed through the proposed Information Systems Facility. Estimated Energy/Utilities Requirements: 12.47 kV primary power would be run underground to feed the down range pad-mounted transformers located in the power centers. Range targets will be fed underground using 480V, three-phase, or 240V, single-phase secondary power from the closest power center. Each downrange, lighted and heated, range limit marker and each video camera will require 120-volt power fed underground from the nearest power source. Air conditioning (approximately 20 tons) will be provided for the support buildings. Sewage: All sewage on the site will be collected in aerated vault latrines and portable toilets and removed by pumper truck. No sewage lines or septic fields are required. Water: Water will be trucked to the site and stored in a tank. No waterline, distribution systems or wells are required. The range would support mounted and dismounted Infantry, US Army aviation, close air support, artillery, and air defense artillery gunnery and live fire maneuver gunnery training operations. This proposed project would be sited along Lava Road approximately five miles from Lava Road's entry into the Pohakuloa Military Training Area and approximately one half mile south of Bradshaw airfield.

The proposed range project would be oriented to the south toward the pre-existing impact area and built over the current Range 11 on the eastern portion of PTA. Probable environmental effects: Potential impacts during construction could include, but are not limited to, cultural impacts, impacts to natural resources such as plants and animals, and an increase in noise and dust levels. Operational impacts may include impacts to cultural and natural resources such as plants and animals, and noise and air quality. Probable environmental effects: Potential impacts during construction could include, but are not limited to, cultural impacts, impacts to natural resources such as plants and animals, and an increase in noise and dust levels. Operational impacts may include impacts to cultural/historic resources and natural resources such as plants and animals, and noise and air quality.

18. Anti-armor Live Fire & Tracking Range (AALFT) at Pohakuloa Training Area (PTA) – Propose to construct a modified standard AALFT with primary features that would include: Tracking roads, service roads, 21 stationary armor targets, 8 moving armor targets. All targets would be fully automated and the event specific target scenario computer driven and scored from the control facility. This facility would accommodate individual through company anti-armor gunnery training. Support facilities would include: minor road improvement; electric service; telephone service; three control towers; large after action review facility; two small, after action review facilities; ammunition breakdown building; ammunition loading dock; three general instruction buildings, operations/storage building; latrine (aerated-vault); concrete pads for portable toilets and bivouac areas (military field training camp sites); outdoor covered eating area; maintenance building maintenance yard; and bleacher enclosure. Estimated Energy/Utilities Requirements: Supply Downrange 12.47KV, 480/277 and 240/120V power distribution would be required for this range. This project would include providing power from the existing overhead 12.47 KV, three-phase primary line near the Weather Tower (approximately 9100 m). A 12.47KV overhead power line will be built from the Weather Tower to existing and new AALFT locations. 12.47KV power would be run underground from the new overhead power line to each AALFT range, to a pad-mounted transformer located near each control tower. This transformer would provide underground secondary (240/120V) to each range control tower. All facilities will be provided with 240/120V from a panel in each control tower. Telephone: Telephone service is available within one KM of the proposed site, and would extend to the After Action Review facility, each control tower, and other applicable buildings. Telephone service would be underground between buildings. Sewage: All sewage on the site will be collected in aerated vault latrines and portable toilets and removed by pumper truck. No sewage lines or septic fields are required. Water: Water would be trucked to the site and stored in a tank. No water lines, wells or distribution system are required. This proposed project would be overlaid on existing Range 8 and sited approximately halfway between Lava Road and the Hilo-Kona Road on the east side of the PTA. The proposed range project would be oriented to the west toward the pre-existing impact area. Probable environmental effects: Potential impacts during construction could include, but are not limited to, cultural impacts, impacts to natural resources such as plants and animals, and an increase in noise and dust levels. Operational impacts may include impacts to cultural/historic resources, natural resources such as plants and animals, and noise and air quality.

19. Easement/Construct Road between Kawaihae and Pohakuloa Training Area (PTA) – Propose to purchase approximately 109 acres of land in a perpetual easement estate and construct a 24 feet wide gravel road with 3 feet wide gravel shoulders on both sides that would run from Kawaihae Harbor to PTA. This road would afford military vehicles transporting troops, ammunition, and equipment to Pohakuloa Training Area access from Kawaihae Harbor. This proposed project would be sited from Kawaihae Harbor to the PTA running approximately 30 miles. This Road would replace the existing "tank trail" but may not follow the current route. See enclosed map of *Proposal: Renovate Military Trail Kawaihae Harbor – Pohakuloa Training Area* for proposed location. Probable environmental effects: Potential impacts during construction could include, but are not limited to, cultural/historic impacts, impacts to natural resources such as plants and animals, and noise and dust. Operational impacts may include visual, cultural and natural resources, traffic, air and noise quality, and public access.

20. Ammunition Storage Area at Pohakuloa Training Area – Propose to construct a 6,750 square foot ammunition storage facility consisting of three standard-design, earth mounded, oval arched, primary ammunition igloos, ammunition holding area, covered residue area, and lightening protection for training. Munitions storage areas would be equipped with intrusion detection systems (IDS) with a central monitor panel in the administration facility and a control panel at the Military Police station. Work would also include installation of pole-mounted security lights; floodlights mounted above each entrance, and information systems. Supporting facilities would include utilities, electric service, storm drainage, paving, access roads, information systems, and site improvements. Estimated Energy/Utilities Requirements: Electrical Power: Estimated at 5 KW. Estimated Energy Consumption: 32,564 KWH/YR. Electrical power would be distributed through base substation and distribution system. Present distribution system is believed adequate to meet the project requirement without enlargement. Heating System: None; Air Conditioning System: None; Water Supply: none; Sewer System: none. These igloos would be co-located with existing ammunition igloos in the Pohakuloa Training Area. Probable environmental effects: Potential impacts during construction could include, but are not limited to, cultural/historic impacts, impacts to natural resources such as plants and animals, and noise and dust. Operational impacts may include safety considerations, light pollution.

21. Tactical Vehicle Wash at Pohakuloa Training Area (PTA) – Propose to construct a wash facility designed to accommodate an 18.3-meter long by 3.7-meter wide vehicle and would have four wash stations that would be able to wash two 2 heavy tracked vehicles, two large vehicles, and four small vehicles in one hour, or a similar combination. The proposed wash system would utilize a high-pressure wash system and would recycle water to minimize wastewater disposal. The water would flow through a water sediment basin, an equalization basin, and the secondary treatment. Treatment would include oil and grease removal, grit removal, and organic control. An oil-water separator would be provided to treat any residual water that did not go through the main system. Estimated Energy/Utilities Requirements: Electrical Power: Estimated at 95.4 KW. Estimated Energy Consumption: 546,482 KWH/YR. Heating System: None; Air Conditioning System: None; Water Supply: 13,470K gal/year. Probable environmental effects: Potential impacts during improvement/construction could include, but are not limited to, cultural and historical impacts, impacts to natural resources such as plants and animals, and an increase

in noise and dust levels. Operational impacts may include wastewater and infrastructure impacts.

22. West Pohakuloa Training Area Maneuver Training Area – Propose to expand use of approximately 15,000-23,000 acres of additional land adjacent to PTA. Expansion may be accomplished through a rental agreement, lease or purchase. The proposed use of this land would be for brigade task force maneuver training area, vehicle maneuver training and a paratrooper, drop-zone. The Army has leased the property on an interim basis for military training area in the past. See enclosed map of *Possible Pohakuloa Force-on-Force Training Area* for proposed location. Probable environmental effects: Operational impacts may include public access, noise, dust, land-use, natural/cultural, and socio-economic.

23. Range Maintenance Facility at Pohakuloa Training Area – Propose to construct a 15,150 square foot Consolidated Range Maintenance Complex. The proposed complex would include administrative space for Range Maintenance, a carpentry shop, welding shop, target and raw material storage, and parking for privately owned vehicles and vehicles and equipment used by Range Division. Estimated Energy/Utilities Requirements: Existing electrical lines are located approximately 100 feet north of the project site. Continued availability of these resources is anticipated. Power requirements to operate building systems and equipment would include: administrative space - single phase, 250 amp service; carpentry shop – three- phase/four wire, 250 amp service; welding shop – three - phase/four wire, 400 amp service. A 150kVA transformer would also be required. Air conditioning (estimated at 10 tons) would be provided for administrative space only. Mechanical ventilation would be provided in warehouse and shop areas. Water would be provided through a connection to an existing line located approximately 150 feet north of the proposed site. Sewer: Collection and treatment of sanitary sewage would be provided by a standard septic system, including septic tank and leach fields to be located immediately to the west of the site. This proposed facility would be sited within the cantonment area of the PTA near an existing unit vehicle maintenance facility. This proposed project would be sited on the west side of the Pohakuloa Cantonment Area, approximately 300 feet north of the Pohakuloa main entrance of Saddle Road. Probable environmental effects: Potential impacts during construction could include, but are not limited to, cultural/historic impacts, impacts to natural resources such as plants and animals, and noise and dust. Operational impacts may include energy.

24. Upgrade Runway Bradshaw Army Airfield at Pohakuloa Training Area – Propose to lengthen and strengthen, or reorient the existing runway to accommodate C-130 and C-17 aircraft. Upgrade would include constructing a fixed wing runway extension with shoulders and turnaround area and replace/upgrade the asphalt concrete pavement of the existing 4,750 feet runway with its taxiway and apron. The 90 ft. x 1,450 ft. runway extension would require 10 ft. x 1,458 ft. shoulders and a 120 ft. x 180 ft. If the runway were reoriented, it would remain on the current Bradshaw Army Airfield site. Estimated Energy/Utilities Requirements: Electrical power would be supplied through base substation and distribution system. Present distribution system is believed adequate to meet the project requirement without enlargement. The designer is to confirm this during design. Electrical Power: Estimated at 1.8 KW. Estimated Energy

Consumption: 15,768 KWr/YR. Heating System: None; Air Conditioning System: none; Water Supply: none; Sewer System: none. Probable environmental effects: Potential impacts during construction could include, but are not limited to, cultural/historic impacts, impacts to natural resources such as plants and animals, and noise and dust. Operational impacts may include air traffic, safety considerations, land use, noise, and water quality.

25. Fixed Tactical Internet (FTI) at PTA – Propose to install a FTI that would provide necessary tactical communications infrastructure at home-station, enabling units to train using digitized equipment 24 hours per day, seven days a week without the need for signal units to deploy to the field. When linked to the installation information infrastructure, FTI could also provide connectivity for the command and control integration of virtual and constructive simulation training with live fire. FTI is a group of antennas, similar to small cellular phone towers, strategically placed through the installation and training area, whereby radios within military vehicles would be able to receive communication signals to process both voice and data. A group of 4-6 antennas will be emplaced in the Pohakuloa Training Area.

26. Prepare an Environmental Impact Statement (EIS) for proposed IBCT Transformation. – Prepare an EIS in accordance with the requirements of the National Environmental Policy Act requirements. Identify the proposed action, solicit and encourage community input. Examine potential impacts to natural, socio-economic, historic and cultural resources; identify and consider reasonable alternatives and identify mitigative actions to minimize or preclude potential adverse impacts of the proposed action.